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TRANSACTIONS AND ABSTRACTS.

1923.

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- β -Benzoyl- Δ^2 -butenoic acid** (MAYER and STAMM), A., i, 803.
- γ -Benzoylbutyronitrile**, and its semicarbazone (BRUYLANTS), A., i, 1003.
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- Benzoyl- γ -di-*n*-butylamino-*n*-propanol**, *p*-amino-, salts (ABBOTT LABORATORIES), A., i, 336.
- Benzoyldihydroindigotinmalonic acid**, ethyl ester (POSNER and PYL), A., i, 253.
- Benzoyldimethylaminotetrahydronaphthalene hydrochlorides** (GONZÁLEZ and CAMPOY), A., i, 209.
- 4-Benzoyl-2:5-dimethylbenzoic acid**, and 2':5'-*dichloro*- (DE DIESBACH, PERRIG, BETSCHART, and STREBEL), A., i, 805.
- 5-Benzoyl-2:4-dimethylbenzoic acid**, and 2':5'-*dichloro*- (DE DIESBACH, PERRIG, BETSCHART, and STREBEL), A., i, 805.
- 1-Benzoyl-3:5-dimethylpyrazole** (MORGAN and ACKERMAN), T., 1316.
- Benzoyldiisopropylhydrazine** (TAIPALE), A., i, 548.
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- 3-Benzoyl-2-methylindole** (SEKA), A., i, 1125.
- α -Benzoyl- δ -methylornithine** (THOMAS, KAPFFHAMMER, and FLASCHENTRÄGER), A., i, 51.
- 3-Benzoyl-5-methyl-1:2:4-oxadiazole**, oxime, and its derivatives (PONZIO and AVOGADRO), A., i, 857.
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- β -Benzoyl- β -methylpropionic acid** (MAYER and STAMM), A., i, 802.
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- 4-Benzoyloxybenzoic acid**, 2:3-*dihydroxy*- (PACSV), A., i, 340.
- α -Benzoyloxycinnamic acid**, ethyl ester (GAULT and WEICK), A., i, 36.
- 4-Benzoyloxy-2:3-diacetoxybenzoic acid** (PACSV), A., i, 340.
- β -Benzoyloxy- α -diethylaminoethylbutyric acid**, β -*p*-amino-, and β -nitro-, ethyl esters and their hydrochlorides (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 760.
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- 1-Benzoyloxyindole-2-carboxylic acid**, ethyl ester (GABRIEL, GERHARD, and WOLTER), A., i, 704.
- 5-Benzoyloxy-1:4-naphthoquinone**, 2:3-*dichloro*- (WHEELER, DAWSON, and McEWEN), A., i, 1020.

- 6-Benzoyloxy-2-phenyl-5-methylbenz-oxazole** (HENRICH, SUNTHEIMER, and STEINMANN), A., i, 145.
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- γ -Benzoyl- β -phenylbutyric acid, α -mono- and α -*di*-bromo- α -cyano-, and α -mono- and α -*di*-bromo- α -cyano-*p*-chloro-, methyl esters (KOHLE, GRAUSTEIN, and MERRILL), A., i, 56.**
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- γ -Benzoyl- β -phenylbutyronitrile, α -bromodi- α -cyano-, and α -cyano-** (KOHLE and SOUTHER), A., i, 244.
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- $\beta\beta$ -Diphenyl- α -benzylidenepropiophenone hydrochloride** (VORLÄNDER and FRIEDBERG), A., i, 684.
- Diphenylbenzylidenetetrazancarb-anilide** (BUSCH, MÜLLER, and SCHWARZ), A., i, 866.
- $\beta\delta$ -Diphenyl- α -benzylidenetetraaz- γ -carboxylic acid**, ethyl ester (BUSCH, MÜLLER, and SCHWARZ), A., i, 865.
- $\alpha\alpha$ -Diphenyl- β -benzylpropane- $\alpha\beta$ -diol** (TIFFENEAU and LÉVY), A., i, 789.
- Diphenyl- β -bromo- β -benzoyl- α -phenylethylphosphine oxide** (CONANT, BRAVERMAN, and HUSSEY), A., i, 264.
- Diphenyl- β -bromo- β -p-chlorobenzoyl- α -phenylethylphosphine oxide**, and its isomeride (CONANT, BRAVERMAN, and HUSSEY), A., i, 264.
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- $\alpha\delta$ -Diphenyl-*n*-butane, β -hydroxy-**, and its derivatives (V. BRAUN and KOCH-ENDÖRFER), A., i, 1198.
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- s*-Diphenylcarbamide, *d*-nitroso-** (RYAN and O'TOOLE), A., i, 381.
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- 5:6-Diphenyl-2-chloromethyl-2:5-dihydro-1:4-diazine** (PHILIPPI, SEKA, and ABLEIDINGER), A., i, 1185.
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- iso*Diphenylenesulphidoquinone** (HINSBERG), A., i, 1102.
- $\alpha\alpha$ -Diphenylethane, β -chloro- α -hydroxy- α -di-*o*-hydroxy-** (HINSBERG), A., i, 923.
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- Diphenylethylidenetetrazancarbanilide** (BUSCH, MÜLLER, and SCHWARZ), A., i, 866.
- Diphenylethylidenetetrazancarboxylamide** (BUSCH, MÜLLER, and SCHWARZ), A., i, 866.
- Diphenylethylidenetetrazancarboxylic acid, ethyl ester** (BUSCH, MÜLLER, and SCHWARZ), A., i, 865.
- n*- and *iso*-Diphenylethylphenofluorindinium mono- and di-perchlorates** (KEHRMANN and LEUZINGER), A., i, 488.
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- $\beta\beta$ -Diphenyl- α -ethylpropiofenone** (ALBESCO), A., i, 42.
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- $\alpha\beta$ -Diphenyl- γ -methylbutane- $\alpha\beta$ -diol, (TIFFENEAU and ORÉKHOV), A., i, 334.**
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- n- and iso-Diphenylmethylphenofluorindinum mono- and di-perchlorates** (KEHRMANN and LEUZINGER), A., i, 488.
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- αγ-Diphenyl-β-methylpropan-β-ol** (TIFFENEAU and LÉVY), A., i, 789.
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- βγ-Diphenylpropyldimethylamine**, and its salts and derivatives (V. BRAUN, SEFMANN, and SCHULTHEISS), A., i, 139.
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- 4:6-Diphenyl-2-propylpyridine nitrate** (GASTALDI and PEYRETTI), A., i, 479.
- 4:6-Diphenyl-2-propylpyryliumchloride**, ferric chloride compound (GASTALDI and PEYRETTI), A., i, 478.
- N-Diphenyl-S-propylthiocarbamide**, and its hydriodide (DAINS and THOMPSON), A., i, 382.
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- 2:4-Diphenylpyridine-5-carboxylic acid**, 6-hydroxy-, and its methyl ester (KOHLEK, GRAUSTEIN, and MERRILL), A., i, 55.
- 2:4-Diphenylselenophen**, and its 5-mercurichloride (BOGERT and HERRERA), A., i, 240.
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- $\beta\beta$ -Di-*n*-propylglutaric acid**, *aa'*-*di*-bromo- and its ethyl ester, and α -bromo- α' -hydroxy-, and its ethyl ester, lactones (BAINS and THORPE), T., 1210.
- $\beta\beta$ -Di-*n*-propylglutarolactone**, *aa'*-*di*-bromo- α' -hydroxy-, ethyl ester (BAINS and THORPE), T., 2744.
- Diisopropyl*hydrazine**, salts of (TAIPALE), A., i, 548.
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- Diisopropylidene*galactosylhydrazine-dicarboxylic acid dianilide** (FREUDENBERG and HIXON), A., i, 1179.
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- 1-Phenyl-2:3-dimethyl-5-pyrazolone**, 4-amino-, carbamate (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 858.
- 1-Phenyl-2:3-dimethylpyrazol-5-one-4-ethylaminomethyl sulphite**, sodium derivative (BOCKMÜHL and WINDISCH), A., i, 29.
- 4-Phenyl-1:2-dimethylpyrrolidine**, and its hydrobromide (KÖHLER and DRAKE), A., i, 1118.
- 4-Phenyl-2:6-dimethylpyrylium iodides** (SCHNEIDER and JACOBI), A., i, 1111.
- 4-Phenyl-2:6-dimethyltetrahydropyran-4-ol**, and its derivatives (BORSCHÉ and THIELE), A., i, 1111.
- 4-Phenyl-2:5-dimethylthiazole**, and its salts (SMITH), T., 2291.
- 1-Phenyl-3:5-dimethyl-1:2:4-triazole**, 1-*p*-bromo-, and its hydrochloride (GASTALDI), A., i, 1238.
- 9-Phenyl-1:3-dimethyluric acid** (MOORE and GATEWOOD), A., i, 254.
- 9-Phenyl-1:3-dimethyl- ψ -uric acid**, and its monohydrate (MOORE and GATEWOOD), A., i, 254.
- β -Phenyl- $\alpha\alpha$ -dimethylvaleramide** (ALBESCO), A., i, 42.
- β -Phenyl- $\alpha\alpha$ -dimethylvaleric acid** (ALBESCO), A., i, 42.
- N*-Phenyldi-2-naphthathiazime** (KEHRMANN, GRESSLY, CHIFFÈRE, and RAMM), A., i, 378.
- 6-Phenyldinaphthathiazine-5:7:12:14-diquinone** (FRIES and OCHWAT), A., i, 843.
- 6-Phenyldinaphthathiazine-5:7:12:14-diquinone**, 6-*p*-chloro- (FRIES and OCHWAT), A., i, 843.
- Phenyldi- β -naphthyl phosphate** (CHEMISCHE FABRIK GRIESHEIM ELEKTRON), A., i, 920.
- Phenoldiphenesin**, and its derivatives (DUTT), T., 226.
- N*-Phenyldiphenimide**, *o*-amino-, acetyl derivative (BISTRZYCKI and FÄSSLER), A., i, 849.
- Phenyl diphenylvinyl ketone**, and its derivatives (VORLÄNDER, OSTERBURG, and MEYER), A., i, 682.
- Phenyldi-4'-resorcinolmethane**, *op*-din-*nitro*-, and its calcium salt (DOWNEY and LOWY), A., i, 579.
- Phenylene-1-acetic-2-propionic acid**, ethyl ester, and its derivatives (HELFER), A., i, 1229.
- 1:2-*o*-Phenyleneacetyl-1:3-benzodiazole** (BISTRZYCKI and FÄSSLER), A., i, 849.
- o*-Phenylenediacetic acid monoamide** (COFFEY), A., i, 696.
- o*-Phenylenediacetic acid, $\alpha\alpha'$ -dibromo-**, ethyl ester, preparation of (CHALLENGER and INGOLD), T., 2074.
- $\alpha\alpha'$ -dihydroxy-**, and its derivatives (CHALLENGER and INGOLD), T., 2075.
- o*-Phenylenediacetonitrile**, dibromo- (CHALLENGER and INGOLD), T., 2078.
- o*-Phenylenediamine**, action of, on diphenylmaleic, diphenic, and homophthalic anhydrides (BISTRZYCKI and FÄSSLER), A., i, 848.
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- Phenylene-1:2-diarsinic acid**, 4-amino-, and 4-nitro-, and their salts and derivatives (LIEB and WINTERSTEIN), A., i, 873.
- Phenylene-1:4-diarsinic acid**, 2-bromo-, 2-chloro-, and 2-hydroxy- (LIEB and WINTERSTEIN), A., i, 874.
- Phenylethane**, aminohydroxy-derivatives (HINSBERG), A., i, 556.
- chlorohydroxy-derivatives (HINSBERG), A., i, 923.
- α -Phenylethane- $\alpha\beta\beta$ -tricarboxylic acid**, methyl ester (KÖHLER and CORSON), A., i, 1015.
- β -Phenylethane- $\alpha\alpha\beta$ -tricarboxylic acid**, β -hydroxy-, trimethyl ester (KÖHLER and CORSON), A., i, 1016.
- Phenylethanoylethylamine**, *d*- and *l*-*o*-dihydroxy-, and their hydrogen tartrates (SOCIETY OF CHEMICAL INDUSTRY IN BASLE), A., i, 924.
- Phenylethanolmethylamine**, *d*- and *l*-*o*-dihydroxy-, bromocamphor sulphionate and hydrogen tartrates (SOCIETY OF CHEMICAL INDUSTRY IN BASLE), A., i, 924.
- r*- β -Phenyl- β -ethoxyethylmethylamine**, 3:4-dihydroxy-, hydrochloride and methyl ether (FUNK and FREEDMAN), A., i, 939.
- Phenyl β -ethoxystyryl ketone** (DUFRAISSE and GÉRALD), A., i, 114.
- Phenylethyl alcohol**, *o*-chloro- (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 1132.

- Phenylethyl alcohols**, primary disubstituted, dehydration of (RAMART and BLONDEAU), A., i, 676.
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- β -hydroxy- β -2-amino-4-hydroxy-** (HINSBERG), A., i, 465.
- β -Phenylethylamine**, *p*-amino-, and its salts and derivatives (v. BRAUN and BLESSING), A., i, 1230.
- 5-Phenylethylamino-3-ethoxyacridine**, 5-*p*-hydroxy- (FARBWERKE, VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 1130.
- α -Phenyl- α -ethylbutaldehyde**, and its semicarbazone (TIFFENEAU and LÉVY), A., i, 788.
- β -Phenylethyl-*tert*-butylcarbinol** (HILL, SPEAR, and LACHOWICZ), A., i, 789.
- Phenylethylcarbamide**, *p*-hydroxy- (CLOETTA and WÜNSCHE), A., i, 516.
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- Phenylethylcarbamyl-3:4-methylenedioxybenzantialdoxime** (BRADY and RIDGE), T., 2166.
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- β -Phenylethyldimethylamine**, *p*-amino-, and its hydrochloride (KINDLER, BURGHARD, FINNDORF, DEHN, GIESE, and KÖRDING), A., i, 572.
- β -Phenylethyldimethylarsine**, and its derivatives (TURNER and BURY), T., 2490.
- α -Phenylethylene- $\alpha\beta$ -dicarboxylic acid**, β -cyano-, methyl ester (KÖHLER and CORSON), A., i, 1015.
- β -Phenylethylene- $\alpha\alpha\beta$ -tricarboxylic acid**, trimethyl ester (KÖHLER and CORSON), A., i, 1016.
- δ -Phenyl- γ -ethylhexane** (ALBESCO), A., i, 42.
- β -Phenylethylcyclohexylamine**, and its salts (v. BRAUN, BLESSING, and ZOBEL), A., i, 1089.
- α -Phenylethylidenemethylamine** (KINDLER, BURGHARD, FINNDORF, DEHN, GIESE, and KÖRDING), A., i, 571.
- 5-Phenylethylidenetherodamine** (GRÄNACHER, GERÖ, OFNER, KLOPFENSTEIN, and SCHLATTER), A., i, 707.
- β -Phenyl- α -ethylidenetetrazan- $\gamma\delta$ -dicarboxylic acid**, ethyl ester (BUSCH, MÜLLER, and SCHWARZ), A., i, 866.
- β -Phenylethylmethylbromoarsine** (TURNER and BURY), T., 2491.
- β -Phenylethylmethylchloroarsine** (TURNER and BURY), T., 2491.
- α -Phenylethylphosphinic acid**, β -mono- and $\alpha\beta$ -di-bromo- and -chloro-, and $\alpha\beta$ -dihydroxy- (CONANT and COYNE), A., i, 69.
- Phenyl- α -ethylstyryl ketone** (ALBESCO), A., i, 42.
- 1- β -Phenylethyl-1:2:3:4-tetrahydronaphthalene** (v. BRAUN and KOCHENDORFER), A., i, 1198.
- Phenylethylurethane**, 4-*mono*-, and 2:4-di-nitro- (RYAN and CONNOLLY), A., i, 322.
- β -Phenylfumaric acid**, α -cyano- (KÖHLER and CORSON), A., i, 1015.
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- β -Phenylglucoside**, barium phosphate of (HELFERICH, LÖWA, NIPPE, and RIEDEL), A., i, 898.
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- Phenylglyoxime**, and amino-, isomeric, and their salts, and chloro-, and its nickel salt and acetyl derivative (PONZIO and AVOGADRO), A., i, 472.
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- Phenylguanidine-*o*-sulphonic acid**, *p*-bromo- and *p*-chloro-, and their potassium salts (SCOTT and COHEN), T., 3187.
- Phenylguanyltiosemicarbazide**, and its hydrochloride and methyl ether (ARNDT and TSCHENSCHER), A., i, 1139.
- ζ -Phenylheptoic acid**, chloride and piperidide from (STAUDINGER and MÜLLER), A., i, 364.
- 1-Phenylcyclohexane**, 3:5-dibromo- (USPENSKI), A., i, 669.
- 5-Phenyl-0:1:3-bicyclohexane** (USPENSKI), A., i, 669.
- γ -Phenylhexane- $\gamma\delta$ -diol** (TIFFENEAU and LÉVY), A., i, 788.
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- 2-Phenylcyclohexanone**, oxime and semicarbazone (v. BRAUN, GRUBER, and KIRSCHBAUM), A., i, 108.
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- Phenylhexoic acid**, chloride and piperide from (STAUDINGER and MÜLLER), A., i, 363.
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- o-Phenylcyclohexylmethylethylamine** methiodide (v. BRAUN), A., i, 839.
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- 5-Phenylhydrazinoacridine**, and 2-nitro-, and its hydrochloride (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 1130, 1131.
- 5-Phenylhydrazino-8-isoamyloxyacridine**, 2-nitro- (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 1131.
- 5-Phenylhydrazino-3-ethoxyacridine** (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 1131.
- 5-Phenylhydrazino-8-ethoxyacridine**, 2-amino-, and 2-nitro- (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 1131.
- Phenylhydrazones**, formation of (ODDO and PIATTI), A., i, 255.
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- Phenylhydroxylamine**, condensation of, with hydroxymethylene-compounds and carbinols (RUPE and DIEHL), A., i, 117; (RUPE and GRÜNHOLZ), A., i, 374.
- β-Phenylhydroxylamine**, conversion of, into quinoline bases (BAMBERGER and WEITNAUER), A., i, 60.
- β-Phenylhydroxylamine**, 2:4- and 2:6-dinitro-, and their salts and derivatives (BORSCHKE), A., i, 778.
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- Phenylimido-phosgene**. See Phenylcarbylamine chloride.
- 2-Phenylimino-5-hydroxy-3-p-anisylthiazan**, and its picrate (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- 2-Phenylimino-5-hydroxy-3-p-chlorophenylthiazan** (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- 2-Phenylimino-5-hydroxy-3-phenylthiazan**, and its derivatives (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- 2-Phenylimino-5-hydroxy-3-p-tolylthiazan** (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- 1-Phenylimino-2-naphthaquinone**, preparation of (SOCIÉTÉ ANONYME DES MATIÈRES COLORANTES, WAHL, and LANTZ), A., i, 1103.
- 2-Phenylimino-3-phenyl-5-methylthiazolidine** and its picrate and 2-p-bromo-, (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- 2-Phenylimino-3-phenyloxazolidine** (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- Phenyliminosuccinil**, p-chloro- (CHATTAWAY and PARKES), T., 669.
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- 2-Phenylimino-3-p-tolyl-5-methylthiazolidine**, and its picrate and 2-p-bromo- (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.
- 2-Phenylimino-3-p-tolylthiazan** (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.

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- Phenylindanylamine**, and *p*-nitro- (COURTOT and DONDELINGER), A., i, 1090.
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- β -Phenylmaleic acid**, α -cyano-, and its potassium hydrogen salt and anhydride (KÖHLER and CORSON), A., i, 1015.
- Phenylmercuric mercaptides** (SACHS, ANTOINE, and SCHLESINGER), A., i, 1248.
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- 9-Phenyl-3-methoxyfluoryl**, and its chloride and derivatives (GOMBERG and BUCHLER), A., i, 211.
- β -Phenyl- β -methoxyphenyl- α -methylpropiophenone** (ALBESCO), A., i, 42.
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- Phenyl *p*-methoxystyryl ketone**, mercuric bromide and chloride (VORLÄNDER and EICHWALD), A., i, 684.
- 3-Phenylmethylamino-2-keto-1-methyl-1:2-dihydroquinoxaline**, and its salts and nitroso-derivative (USHERWOOD and WHITELEY), T., 1087.
- 2-Phenyl-4-methylbenzopyrylium chlorate** and chloride, 7-hydroxy-, and the compound of the chloride with resorcinol (BUCK and HEILBRON), T., 2526.
- 4-Phenyl-2-methylbenzothiazolonyl-methylthiazole methiodide** (MILLS, BRAUNHOLTZ, and SMITH), T., 2812.
- 2-Phenyl-5-methylbenzoxazole**, 4- and 6-hydroxy- (HENRICH, SUNTHEIMER, and STEINMANN), A., i, 145.
- 2-Phenyl-6-methyl-2:1:3-benzotriazole**, 5-nitro-, 3-oxide (MICHELE and MARIO GIUA), A., i, 609.
- 2-Phenyl-7-methyl-2:1:3-benzotriazole**, 5-nitro- (BORSCHKE), A., i, 781.
- α -Phenyl- β -methyl- $\Delta\alpha$ -butylene**, and its nitrosite (TIFFENEAU and LÉVY), A., i, 789.
- γ -Phenyl- α -methyl-*n*-butyranilide** (KROLLPFEIFFER and SCHÄFER), A., i, 344.
- γ -Phenyl- α -methylbutyric acid**, α -hydroxy-, and its acetyl derivative (ATTWOOD, STEVENSON, and THORPE), T., 1765.
- γ -Phenyl- β -methylbutyric acid**, β -hydroxy-, and its ethyl ester (ATTWOOD, STEVENSON, and THORPE), T., 1765.
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- Phenylmethylcarbinol**, *p*-bromo- (ZIEGLER and TIEMANN), A., i, 31.
- Phenylmethylcarbinol-digitonin** (WINDAUS and WEINHOLD), A., i, 590.
- γ -Phenyl- β -methylcinnamyl alcohol**, and its benzoate (ZIEGLER and TIEMANN), A., i, 31.
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- 5-Phenyl-3-*mp*-methylenedioxyphenyl-2:3-dihydropyrrole**, 1-hydroxy- (KÖHLER and DRAKE), A., i, 1119.
- 5-Phenyl-3-*mp*-methylenedioxyphenyl-2:3-dihydropyrrole-1-benzenesulphone** (KÖHLER and DRAKE), A., i, 1119.
- β -Phenyl- β -methylenedioxyphenyl- α -methylpropiophenone** (ALBESCO), A., i, 42.
- β -Phenyl- β -methylenedioxyphenylpropiophenone** (ALBESCO), A., i, 42.
- 2-Phenyl-4-*mp*-methylenedioxyphenyl-tetrahydropyrrole**, and its hydrochloride (KÖHLER and DRAKE), A., i, 1119.
- 6-Phenyl- α -methylenevaleric acid**, and its silver salt (MANNICH and GANZ), A., i, 20.
- Phenylmethylethylamine**, hydroxy-derivatives (HINSBERG), A., i, 463.
- Phenylmethylethylcarbinyl chromate** (WIENHAUS and TREIBS), A., i, 893.
- β -Phenyl- α -methyl- β -ethylpropiophenone** (ALBESCO), A., i, 42.
- 1-Phenyl-3-methyl-5-ethyl-1:2:4-triazole**, and its salts, and 5-hydroxy-1-*p*-bromo- (GASTALDI), A., i, 1238.
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- Phenylmethylguanylcabamide** (PELLIZZARI), A., i, 1002.
- Phenyl-*cis*- α -methylcyclohexylthiocarbamide** (SKITA, HÄUBER, and SCHARENBERG), A., i, 672.
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- 5-Phenyl-3-methylisooxazole**, 4-nitroso- (PONZIO), A., i, 470.
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- 1-Phenyl-2-methyl-3-pentadecylpyrazol-5-one** (HELFERICH and KÖSTER), A., i, 1171.
- γ -Phenyl- β -methylpentane** (ALBESCO), A., i, 42.
- β -Phenyl- α -methylpropionic acid**, α -hydroxy-, and its ethyl ester (TIFFENEAU and LÉVY), A., i, 789.
- γ -Phenyl- β -methylpropyldimethylamine**, and its salts (v. BRAUN, SEEMANN, and SCHULTHEISS), A., i, 138.
- 1-Phenyl-3-methylpyrazol-5-one**, 4-hydroxy- (DIMROTH, SCHWEIZER, and SCHAAFF), A., i, 745.
- 2-Phenyl-4-methylpyrimidine-5-carboxylic acid**, and its ethyl ester (MITTER and BARDHAN), T., 2180.
- 1-Phenyl-2-methylpyrrole-3-carboxylic acid**, 4-hydroxy-, and its methyl ester (BENARY and KONRAD), A., i, 241.
- 1-Phenyl-2-methylpyrrole-3-nitrile**, 4-hydroxy- (BENARY and LAU), A., i, 366.
- 4-Phenyl-2-methylpyrrolidine**, and its *N*-benzoyl derivative (KÖHLER and DRAKE), A., i, 1118.
- 4-Phenyl-2-methylquinoline** (KNOLL & Co.), A., i, 947.
- 2- and 3-Phenyl-1-methyl-1:2:3:4-tetrahydroquinolines**, and their salts and derivatives (v. BRAUN, SEEMANN, and SCHULTHEISS), A., i, 138.
- 9-Phenyl-3-methyluric acid**, 8-thio- (TRAUBE), A., i, 1136.
- 9-Phenyl-7-methyl- π - and - ψ -uric acids** (MOORE and GATEWOOD), A., i, 254.
- 9-Phenyl-3-methylxanthine** (TRAUBE), A., i, 1136.
- 2-Phenyl- $\alpha\beta$ -naphthatriazole**, oxide of, and 2-*p*-chloro- (CHARRIER, CRIPPA, and AGOSTONI), A., i, 1141.
- β -Phenyl-naphthindole-1:2-dione** (STAUDINGER), A., i, 938.
- Phenyl- β -naphthylamine**, 2:4:6-trinitro-3-amino- (DAVIES and JAMES), A., i, 552.
- Phenylnitroanthrone** (BARNETT and COOK), T., 2642.
- β -Phenyl- α -*m*-nitrobenzylidenetetrazan- γ -dicarboxylic acid**, ethyl ester (BUSCH, MÜLLER, and SCHWARZ), A., i, 866.
- Phenyl-*p*-nitrobenzylurethane** (RYAN and O'DONOVAN), A., i, 323.
- Phenyl*d*nitrocarbazole**, *p*-amino-, and its acetyl derivative (G. and M. DE MONTMOLLIN), A., i, 374.
- Phenyl-4:6-dinitro-*m*-tolyl sulphide and sulphone** (GIUA and RUGGERI), A., i, 790.
- δ -Phenyl-octane- $\delta\epsilon$ -diol** (TIFFENEAU and LÉVY), A., i, 788.
- δ -Phenyl-octan- ϵ -one**, and its semicarbazone (TIFFENEAU and LÉVY), A., i, 788.
- 3-Phenyl-1:3:4-oxadiazole**, 5-hydroxy-, sodium salt and methyl ether (PONZIO), A., i, 1138.
- 3-*o*- and *p*-Phenyl-2-oxazolidones**, chloro- (ADAMS and SEGUR), A., i, 458.
- 1-Phenyl-3-pentadecylpyrazol-5-one** (HELFERICH and KÖSTER), A., i, 1177.
- δ -Phenylpentan- β -one**, ϵ -nitro- (KÖHLER and DRAKE), A., i, 1118.
- δ -Phenylpentenoic acids**, and their derivatives (STAUDINGER, SCHNEIDER, and PFISTER), A., i, 362.
- 2-Phenylphenanthriminazole**, bromo-nitro-, bromohydroxy-, nitro-, nitro-amino-, and nitrohydroxy-derivatives (A. C. and G. C. SIRCAR), T., 1561.
- 1-Phenyl-5-phenoxy-methyl-3-methylpyrazole**, 4-cyano- (BENARY and HOSENFIELD), A., i, 37.
- 1-Phenyl-3-phenoxy-methyl-5-methylpyrazole-4-carboxylic acid** (BENARY and HOSENFIELD), A., i, 39.
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p-Toluene-1-azo-β-naphthol-4-sulphonic acid (MORGAN and JONES), A., i, 327.**Toluene-p-4-azo-5-nitro-α-naphthylamine, and its hydrochloride** (MORGAN and JONES), A., i, 1029.**1-p-Toluenediazo-5-nitro-β-naphthylamine** (HOLLIDAY & Co., LTD., and MORGAN), A., i, 388.**Toluene-p-sulphinic acid, sodium salt, preparation of** (WHITMORE, HAMILTON, and THURMAN), A., i, 501.

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- Toluene-*p*-sulphinyl chloride**, and its derivatives (V. BRAUN and KAISER), A., i, 316.
- Toluene-*p*-sulphochloramide**, sodium salt, effect of, on organic substances (ENGFELDT), A., i, 454.
- Toluene-3-sulphonacetic acid**, 4-hydroxy- (GIBSON and SMILES), T., 2391.
- Toluene-*o*-sulphonanilide**, and *p*-chloro- and *p*-nitro- (CLUTTERBUCK and COHEN), T., 2514.
- Toluene-*o*-sulphonhydrazide**, and *p*-chloro- and *p*-nitro- (CLUTTERBUCK and COHEN), T., 2514.
- Toluenesulphonic acid**, 4-amino- β -naphthyl and 4-nitro- β -naphthyl esters (CHALLENGER and INGOLD), T., 2080.
- Toluene-*m*-sulphonic acid**, 6-chloro-5-nitro-, sodium salt, as a reagent for potassium (H. and W. DAVIES), T., 2976.
- Toluene-*p*-sulphonic acid**, halogen-alkyl esters, interaction between organo-magnesium halides and (GILMAN and BEABER), A., i, 453.
- β -chloroethyl ester (BRITISH DYE-STUFFS CORPORATION, LTD., PERKIN, and CLEMO), A., i, 453.
- γ -chloropropyl ester (GILMAN and BEABER), A., i, 454.
- Toluenesulphoniodoamides**, potassium and sodium salts (ROBERTS), T., 851.
- Toluene-*o*-sulphonphenylhydrazide**, and *p*-chloro- and *p*-nitro- (CLUTTERBUCK and COHEN), T., 2514.
- p*-Toluenesulphonylanthranilic acid**, anhydrides from (HELLER and GRUNDMANN), A., i, 245.
- 1-*p*-Toluenesulphonyl-3-benzoylamidopiperidone** (THOMAS, KAPFFHAMMER, and FLASCHENTRÄGER), A., i, 51.
- δ -*p*-Toluenesulphonyl- α -benzoyl- δ -methylornithine** (THOMAS, KAPFFHAMMER, and FLASCHENTRÄGER), A., i, 51.
- δ -*p*-Toluenesulphonyl- α -benzoylornithine** (THOMAS, KAPFFHAMMER, and FLASCHENTRÄGER), A., i, 51.
- 3-*p*-Toluenesulphonylcarbostryl**, and its sodium salt and *O*-ethyl ether (TRÖGER and KÖPPEN-KASTROP), A., i, 370.
- α -*p*-Toluenesulphonylcinnamonitrile**, *o*-nitro- (TRÖGER and KÖPPEN-KASTROP), A., i, 370.
- 3-*p*-Toluenesulphonyldiacetoxyceumarins** (TRÖGER and DUNKEL), A., i, 357.

Toluene compounds, Me = 1.

- 3-*p*-Toluenesulphonyl-5-7-diethoxyceumarin** (TRÖGER and DUNKEL), A., i, 357.
- 3-*p*-Toluenesulphonyldihydroxyceumarins** (TRÖGER and DUNKEL), A., i, 357.
- δ -*p*-Toluenesulphonyl- δ -methylornithine** and its hydrochloride (THOMAS, KAPFFHAMMER, and FLASCHENTRÄGER), A., i, 51.
- 2-*p*-Toluenesulphonyl- β -naphthapyrone**, and hydroxy- (TRÖGER and DUNKEL), A., i, 356.
- 3-*p*-Toluenesulphonyl-2-phenylquinoline**, and its salts (TRÖGER and v. SEELEN), A., i, 1129.
- 3-*p*-Toluenesulphonylquinoline**, 2-amino-, and its salts, and chloro-derivatives (TRÖGER and KÖPPEN-KASTROP), A., i, 370.
- 3-*p*-Toluenesulphonyl-2-*p*-toluenesulphonylmethylquinoline** (TRÖGER and v. SEELEN), A., i, 1127.
- m*-Toluidic acid**, 3-hydroxy-, quinine salt (FARBENFABRIKEN VORM. F. BAYER & Co.), A., i, 939.
- o*-Toluidine**, catalytic preparation of (HENKE and BROWNE), A., i, 201.
- o*-Toluidine**, *p*-bromo- (RESSY and ORTOGOSU), A., i, 833.
- Toluidines**, ultra-violet absorption spectra of (KLINGSTEDT), A., ii, 106.
- β -*o*- and *p*-Toluidinoethyl alcohols** (ADAMS and SEGUR), A., i, 458.
- 2-*p*-Toluidino-5-hydroxy-1:4-naphthaquinone**, 3-chloro- (WHEELER, DAWSON, and McEWEN), A., i, 1021.
- 1-*o*- and *p*-Toluidino- β -naphthols** (WAHL and LANTZ), A., i, 210.
- γ -*o*- and *p*-Toluidinopropyl alcohols** (PIERCE and ADAMS), A., i, 484.
- p*-Tolumethylamide**, thio- (KINDLER, BURGHARD, FINNDORF, DEHN, GIESE, and KÖRDING), A., i, 571.
- β -*p*-Toluoilacrylic acid**, methyl ester (ODDY), A., i, 1098.
- β -*p*-Toluoil- Δ^{α} -butenoic acid** (MAYER and STAMM), A., i, 803.
- β -*p*-Toluoil-*n*-butyric acid**, and its oxime (MAYER and STAMM), A., i, 802.
- m*-Toluoilformic acid**, esters and phenylhydrazones of (POSNER and HEUMANN), A., i, 954.
- β -*p*-Toluoil- α -methylacrylic acid** (MAYER and STAMM), A., i, 803.
- β -*p*-Toluoil- α -methylpropionic acid**, and its oxime (MAYER and STAMM), A., i, 802.
- 1-*p*-Toluoil-9-oxanthronyl** (SCHOLL, DEHNERT, and SEMP), A., i, 808.

Toluene compounds, Me = 1.

- β-p-Toluoylpropionic acid, αβ-dibromo-, and α-chloro- (ODDY), A., i, 1098.*
- Tolyl acetate and benzoate, bromo- and dibromo-amino-, acetyl and benzoyl derivatives (RAIFORD and IDDES), A., i, 326.*
- m-Tolyl methyl ether, sulphonic acids of (HAWORTH and LAPWORTH), T., 2982.*
- amino-, acetyl derivatives (HAWORTH and LAPWORTH), T., 2987.*
- 4:6-dibromo- (HAWORTH and LAPWORTH), T., 2995.*
- 2-nitro- (GIBSON), T., 1273.*
- p-Tolyl acetyl sulphide, and its derivatives (TRÖGER and v. SEELEN), A., i, 1128.*
- 1-p-Tolylamino-β-naphthol (SOCIÉTÉ ANONYME DES MATIÈRES COLORANTES, WAHL, and LANTZ), A., i, 919.*
- Tolylanthranil acetate (BARNETT and COOK), T., 2639.*
- Tolylarsinic acids, hydroxy- (CHRISTIANSEN), A., i, 500.*
- l-m-Tolylasparagine (LUTZ), A., i, 457.*
- m-Tolylaziminobenzene, 2':4'- and 4':6'-dinitro- (MICHELE and MARIO GIUA), A., i, 485.*
- N-p-Tolylbenziminophenyl ether hydrochloride (CHAPMAN), T., 1153.*
- β-o-Tolyl-α-benzylidenetetrazan-γδ-dicarboxylic acid, ethyl ester (BUSCH, MÜLLER, and SCHWARZ), A., i, 867.*
- p-Tolylboric acid (KRAUSE), A., i, 1035.*
- o-Tolylcarbamic acid, γ-chloropropyl ester (DOX and YODER), A., i, 484.*
- o- and p-Tolylcarbamic acids, β-chloro-ethyl esters (ADAMS and SEGUR), A., i, 457.*
- γ-chloropropyl esters (PIERCE and ADAMS), A., i, 484.*
- 9-Tolylcarbazole, m-nitro- (G. and M. DE MONTMOLIN), A., i, 374.*
- 1-p-Tolyl-1:2:3:4-carboxylic acid, 5-chloro- and 5-hydroxy-, ethyl esters (DUTT), T., 273.*
- p-Tolyltrichloromethylcarbinol (PAULY and SCHANZ), A., i, 564.*
- 2:6-Tolylenediamine, dithioacetyl derivative (EDGE), T., 1013.*
- β-o-Tolylethyl alcohol (v. BRAUN and ZOBEL), A., i, 1200.*
- β-o-Tolylethyl bromide (v. BRAUN, ZOBEL, and KÜHN), A., i, 1201.*
- α-p-Tolyl-n-ethylcarbamide (BOEHRINGER & SÖHNE), A., i, 949.*
- p-Tolylglucoside, 3-nitro-, and its acetate (GLASER and PRÜFER), A., i, 694.*

Toluene compounds, Me = 1.

- β-o-Tolyl-α-hydroxybenzylidenetetrazan-γδ-dicarboxylic acid, ethyl ester (BUSCH, MÜLLER, and SCHWARZ), A., i, 867.*
- m-Tolylhydroxylamine, β-4:6-dinitro-, and its acetyl derivative (GIUA), A., i, 1190.*
- p-Tolyl-γ-hydroxypropylamine (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- 2-p-Tolylimino-5-hydroxy-3-p-tolylthiazan, and its salts (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- 2:5-p-Tolylimino-1-phenyldihydro-1:2:3-triazole (DUTT), T., 274.*
- 2-p-Tolylimino-3-phenyl-5-methylthiazolidine, and its picrate (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- 2-p-Tolylimino-3-phenylthiazan (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- 2-o- and -p-Tolylimino-3-phenylthiazolidine (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- m- and p-Tolyliminosuccino-m- and p-tolils (CHATTAWAY and PARKES), T., 667.*
- 2-p-Tolylimino-3-p-tolyl-5-methylthiazolidine, and its picrate (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- 2-p-Tolylimino-3-p-tolylthiazan (DAINS, BREWSTER, BLAIR, and THOMPSON), A., i, 63.*
- o- and p-Tolylindanylamines (COURTOT and DONDELINGER), A., i, 1090.*
- 2-Tolyl-5-methyl-2:1:3-benzotriazoles, 6-nitro-, and their N-oxides (MICHELE and MARIO GIUA), A., i, 610.*
- γ-p-Tolyl-α- and -β-methyl-m-butyric acids, and their derivatives (MEYER and STAMM), A., i, 803.*
- 2-p-Tolyl-4-methylpyrimidine-5-carboxylic acid, and its ethyl ester (MITTER and BARDHAN), T., 2181.*
- p-Tolyl-αβ-naphthatriazole, 6-amino-, and 6-nitro- (HOLLIDAY & Co., LTD., and MORGAN), A., i, 388.*
- 2-p-Tolyl-αβ-naphthatriazole-6-azo-β-naphthol (HOLLIDAY & Co., LTD., and MORGAN), A., i, 389.*
- 1-p-Tolyl-naphthylamine, 2-hydroxy- (SOCIÉTÉ ANONYME DES MATIÈRES COLORANTES, WAHL, and LANTZ), A., i, 674.*
- 3-o- and p-Tolyl-2-oxazolidones (ADAMS and SEGUR), A., i, 457.*
- Tolyloxide, sodium, estimation of cresols in (ISNARD), A., ii, 343.*

- Toluene compounds*, *Me* = 1.
- v-o*-Tolylphenylacetic acid, ethyl ester (v. BRAUN and ZOBEL), A., i, 1200.
- m*-Tolylphenylenediamines, *dinitro*-, and their acetyl derivatives and benzylidene-imines (MICHELE and MARIO GIUA), A., i, 485.
- 3-*o*- and *p*-Tolyltetrahydro-1:3:2-oxazones (PIERCE and ADAMS), A., i, 484.
- Tolylthiocarbimides (DAINS, BREWSTER, and OLANDER), A., i, 324.
- m*-Tolylthiolacetic acid, 5-chloro- and 5-chloro-2-amino- (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 794.
- β-p*-Tolylthiol-*β*-phenylpropionic acid, and its sodium salt (ARNDT, FLEMMING, SCHOLZ, and LÖWENSOHN), A., i, 826.
- βp*-Tolylthiolpropionic acid (ARNDT, FLEMMING, SCHOLZ, and LÖWENSOHN), A., i, 827.
- o*-Tolylurethane, 3- or 5-*mono*-, and 3:5- and 4:5-*di-nitro*- (RYAN and CULLINANE), A., i, 322.
- Topochemical reactions (KOHLSCHÜTTER and STRECK), A., ii, 133; (KOHLSCHÜTTER and ROESTI), A., ii, 164; (KOHLSCHÜTTER and SEDELINOVICH), A., ii, 165.
- Torbenite, Cornish (STEINKUHLER), A., ii, 572.
from Katanga (STEINKUHLER), A., ii, 572.
- Toxins, diphtheria (v. GRÖER), A., i, 880.
- Transport numbers, determination of (MACINNES and SMITH), A., ii, 828.
- Trees, constituents of bark and wood of, in spring growth (RIPPEL), A., i, 521.
- Trehalose, preparation of (HARDING), A., i, 1064.
barium phosphate and sulphate of (HELFERICH, LÖWA, NIPPE, and RIEDEL), A., i, 898.
tetrachlorohydrin disulphate (HELFERICH, LÖWA, NIPPE, and RIEDEL), A., i, 655.
- 2:3:4-Triacetoxybenzoic acid (PACSU), A., i, 339.
- Triacetoxybenzenes (BARGELLINI), A., i, 784.
- Triacetyl-*p*-di-*β*-resorcylic acid (PACSU), A., i, 339.
- Triamines, diazotisability of (MORGAN and DAVIES), T., 228.
- Trianhydrotrisdi-*p*-tolylsilicanediol (PINK and KIPPING), T., 2836.
- 5':7:8-Trianilino-2'-hydroxy-2-phenylphenanthriminazole (A. C. and G. C. SIRCAR), T., 1565.
- Triaquopiperidinemagnesium sulphate (SPACU and RIPAN), A., ii, 73.
- Triaquotriaminemagnesium sulphate. See under Magnesium.
- Triarylmethane colouring matters, preparation of (BRITISH DYESTUFFS CORPORATION, LTD., BADDILEY, and RODD), A., i, 148.
- Triazole, 3-hydroxy-5-thiol-, lead and phenylhydrazine salts (FROMM and NEHRING), A., i, 859.
- 1:2:4-Triazole, derivatives of (GASTALDI), A., i, 1236, 1237.
- 1:2:4-Triazole, 3:4-*diamino*-5-thiol-, and its derivatives (FROMM, LAYER, and NERZ), A., i, 1239.
- Triazole compounds (BRADY and DAY), T., 2258.
- Triazomesityleneindazole (MORGAN and DAVIES), T., 232.
- Triazonitroaminomesitylene (MORGAN and DAVIES), T., 235.
- Triazonitromesitylene (MORGAN and DAVIES), T., 231.
- Tribenzoylbenzenetricarboxylic acid. See Truxenquinonetricarboxylic acid.
- Tribenzylidene trisulphoxide (FROMM and SCHULTIS), A., i, 581.
- Tribenzylideneoxide sulphide sulphone, or disulphoxide (FROMM and SCHULTIS), A., i, 581.
- Tribenzylidenetrisulphone, and its salts and derivatives (FROMM and SCHULTIS), A., i, 581.
- Triboluminescence (LONGCHAMON), A., ii, 204.
- Tributyryl, estimation of hydrolysis of, by lipase (WILLSTÄTTER and MEMMEN), A., ii, 704.
- Triocylene (SCHERING), A., i, 47.
- Tridecanaphthenic acid, and its methyl ester (TANAKA and NAGAI), A., i, 464.
- Triethylammonium dimercuribromide (HANN), A., i, 901.
- Triethylene *tri*- and *tetra*-sulphides, and their derivatives (RÂY), T., 2174.
- Triethylenedisulphone sulphide (RÂY), T., 2177.
- Triethylenedisulphonedisulphonic acid, barium salt (RÂY), T., 2176.
- Triethylenetrisulphone (RÂY), T., 2177.
- 2:2:4-Triethyltetrahydronaphth-*αβ*-diketohydrindene (FLEISCHER and RETZE), A., i, 221.
- 2:2:4-Triethyltetrahydronaphth-*αβ*-hydrindene (FLEISCHER and RETZE), A., i, 221.
- 3:5:10-Triketo-2:3-dihydronaphthathiazine (FRIES and OCHWAT), A., i, 843.
- Triketohydrindene 2-dioxime, and its derivatives (PONZIO and PICCHETTO), A., i, 471.

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